

Date: Thursday, 22/01/2009 2:05:18 PM
User: Julie Dawson

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : GUIDE
Job Number : 45083	
Estimate Number : 11216	
P.O. Number :	Part Number : D33335
This Issue : 22/01/2009 S.O. No. :	Drawing Number : D3333 REV B
Prsht Rev. : NC	Project Number : N/A
First Issue : / / Type : MACHINED PARTS	Drawing Revision : B
Previous Run : 43351	Material :
Written By :	Due Date : 05/02/2009 Qty: 25 Um: Each
Checked & Approved By : <u>JUD 09.01.22</u>	
Comment : Est. A05.01.13 New issue KJ/JLM	

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	M1010B1500X01000	1010-1025 Steel Bar 1.500 x 1.00
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Comment: Qty.: 0.6672 f(s)/Unit Total: ~~20.01511(3)~~ 16.6800 f(s)
 AISI 1010-1025 Steel Bar
 Material: AISI 1010-1025 or ASTM A36/A366/A569/A570 Cold Rolled Steel
 (M1010-B1.500x01.000)
 Identify for D3333-5
 Batch: M110740

H.A 09/02/06

2.0	BAND SAW	BAND SAW
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Comment: BAND SAW
 Cut blanks: 1.500" x 1.000" thick x 7.500" long

H.A 09/02/06

3.0	HAAS1	HAAS CNC VERTICAL MACHINING #1
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Comment: HAAS CNC VERTICAL MACHINING #1
 Machine as per Folio FA484 and Dwg D3333
 Tap holes as per Dwg D3333
 Deburr
 Identify as D3333-5

ml / H.A 09/02/06

4.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
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Comment: INSPECT PARTS AS THEY COME OFF MACHINE

ml / H.A 09/02/06

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Thursday, 22/01/2009 2:05:18 PM
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Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: GUIDE

Job Number: 45083

Part Number: D33335

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

QC8

SECOND CHECK



Comment: SECOND CHECK

SP 07/22/09

6.0

SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1

NIA CY

1- pass parts in deburring machine

7.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

NIA

8.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat Fire Red (Ref: 4.3.5.10) as per QSI 005 4.3

Ensure to mask threaded holes

START TIME:

8:15AM

OVEN TEMPERATURE:

320°F

FINISH TIME:

8:45AM

SP 09-02-18

(25)

9.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

SP 09-02-18 (25)

10.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: _____

SP 09-02-18

SP 09-02-18 (20)

11.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

09/02/2009

Job Completion



MF 09-02-18

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order: <u>W5083</u>
Description: Rail		Part Number: D3333-5
Inspection Dwg: D3333	Rev: B	Page 1 of 1

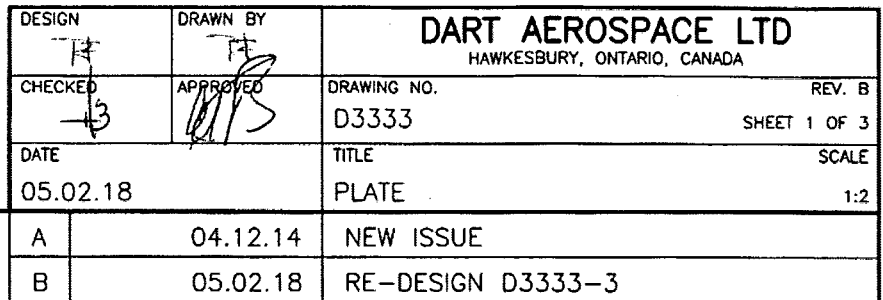
FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article
 ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
0.390	+/-0.010	0.389	✓			
0.506	+0.000/-0.006	0.504	✓			
7.50	+/-0.030	7.50	✓			
6.000	+/-0.010	5.999	✓			
2.000	+/-0.010	1.999	✓			
0.750	+/-0.010	0.748	✓			
1.25	+/-0.030	1.250	✓			
0.506	+/-0.010	0.505	✓			
Ø0.313	+0.005/-0.001	Ø0.314	✓			
1.00	+/-0.030	0.996	✓			
0.500	+/-0.010	0.500	✓			
3.750	+/-0.010	3.749	✓			

Measured by: <u>B.A</u>	Audited by: <u>[Signature]</u>	Prototype Approval:	N/A
Date: <u>09/02/06</u>	Date: <u>09/02/09</u>	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	05.04.26	New Issue	KJ/JLM	
B	08.11.28	Tolerance for 0.506 dimension revised	KJ/EC	<u>[Signature]</u>



Technical drawing of a mechanical part, likely a valve body, showing front and side views with dimensions.

Front View Dimensions:

- Overall width: 8.570
- Distance from left face to center of first hole: 6.75
- Distance between centers of two holes: 5.00
- Distance from center of second hole to right face: 2.50
- Overall height: 3.850
- Distance from top face to center of first hole: 2.50
- Distance from center of first hole to center of second hole: 1.375
- Distance from bottom face to center of first hole: 0.875 (TYP)
- Radius of first hole: R0.30 (TYP)
- Radius of second hole: R0.50 (TYP)
- Radius of third hole: R2.00 (TYP)
- Angle of chamfer: 24° (TYP)
- Distance from left face to center of first hole: 1.300
- Distance from center of first hole to center of second hole: 1.750
- Distance from center of second hole to right face: 2.500
- Thread specification: 1/4-20 THREAD (4 PLACES)

Side View Dimensions:

- Overall thickness: 0.625

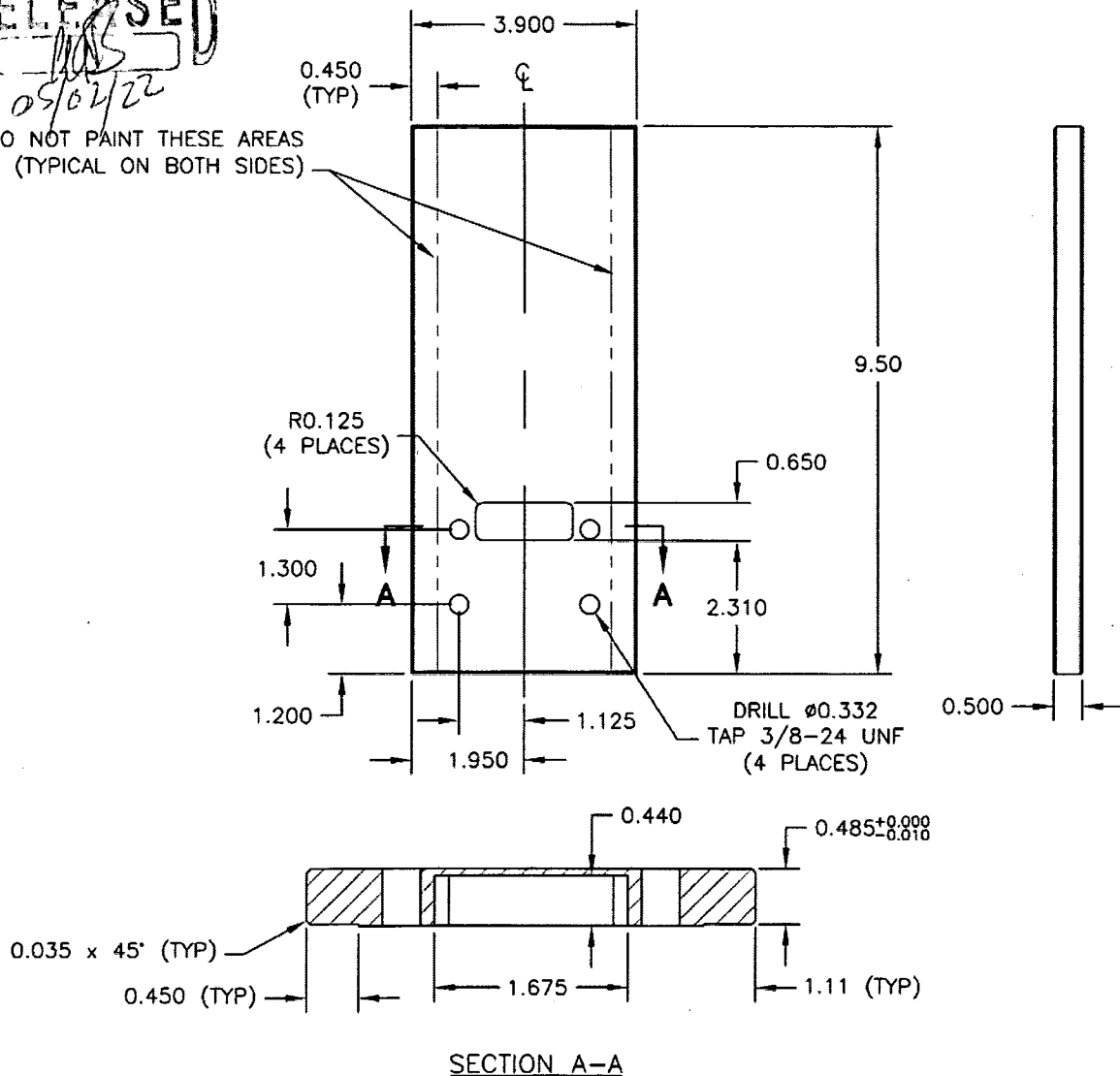
SHOP COPY
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C. M4140 (F) AMENDMENT
SUBJECT
WITHOUT NOTICE
I 005 V4.3.1K ORDER
NO. H5083

1) MATERIAL: AISI 4140 STEEL 0.625 THICK STEEL (REF. DART SPEC. M4140-B) MIN. YIELD TENSILE STRENGTH = 100 ksi
2) FINISH: POWDER COAT PAINT FIRE RED (4.3.5.10) PER DART QSI 005
3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
4) ALL DIMENSIONS ARE INCHES
5) BREAK ALL SHARP EDGES 0.005 TO 0.010

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CHECKED 3	APPROVED [Signature]	DRAWING NO. D3333	REV. B SHEET 2 OF 3
DATE 05.02.18		TITLE PLATE	SCALE 1:4

RELEASED
05/02/22DO NOT PAINT THESE AREAS
(TYPICAL ON BOTH SIDES)**D3333-3 SLIDING PLATE****NOTES:**

- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A569/A570, 0.50 THICK MILD STEEL (REF. DART SPEC. M1010-B)
- 2) FINISH: POWDER COAT FIRE RED (REF. 4.3.5.10) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.010

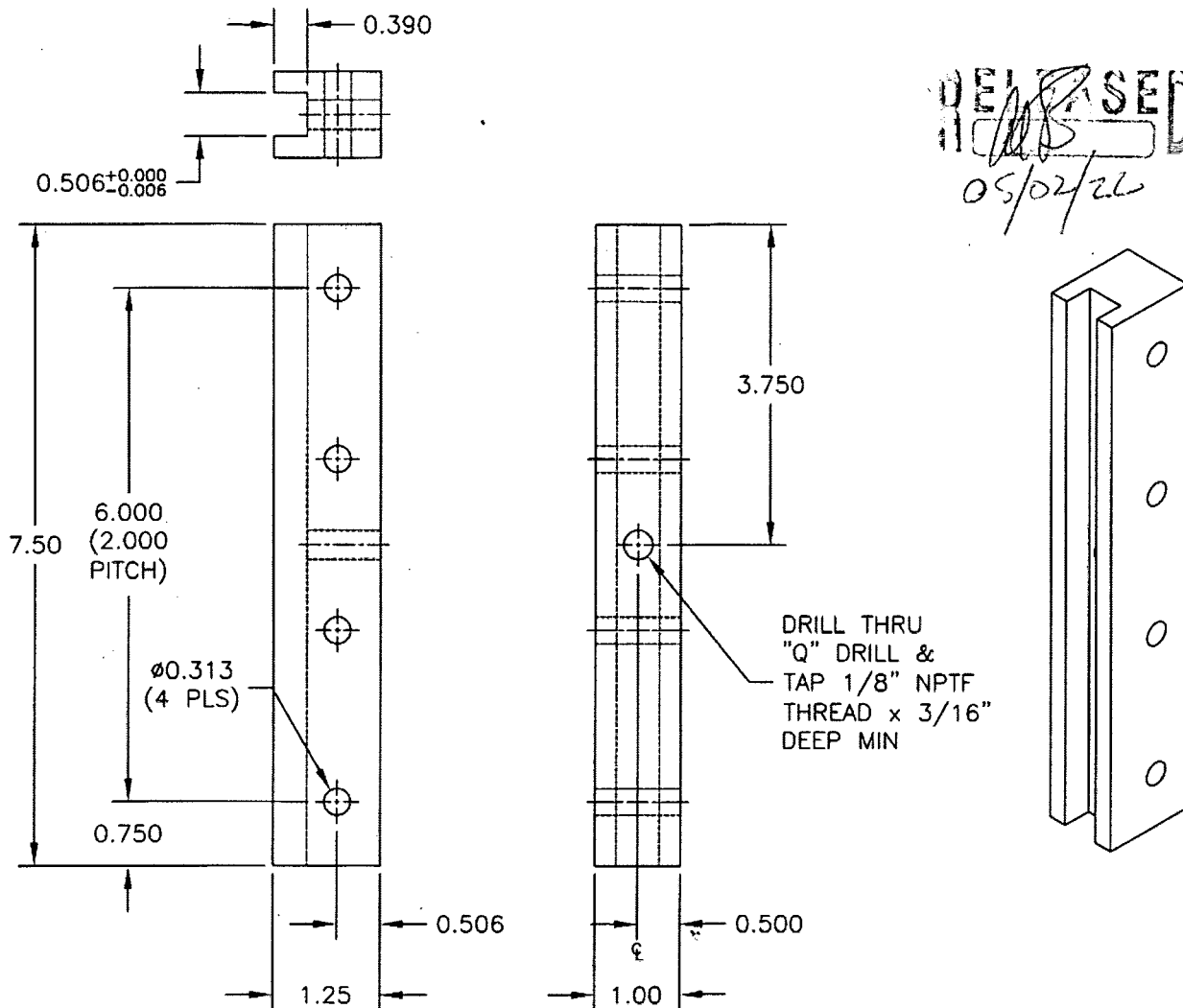
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DESIGN TH	DRAWN BY TH	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED JB	APPROVED [Signature]	DRAWING NO. D3333	REV. B SHEET 3 OF 3
DATE 05.02.18		TITLE PLATE	SCALE 1:2

**D3333-5 RAIL****NOTES:**

- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A569/A570, 1.00 THICK STEEL (REF. DART SPEC. M1010-B)
- 2) FINISH: POWDER COAT FIRE RED (REF. 4.3.5.10) PER DART QSI 005 4.3 WITHOUT NOTICE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.010

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